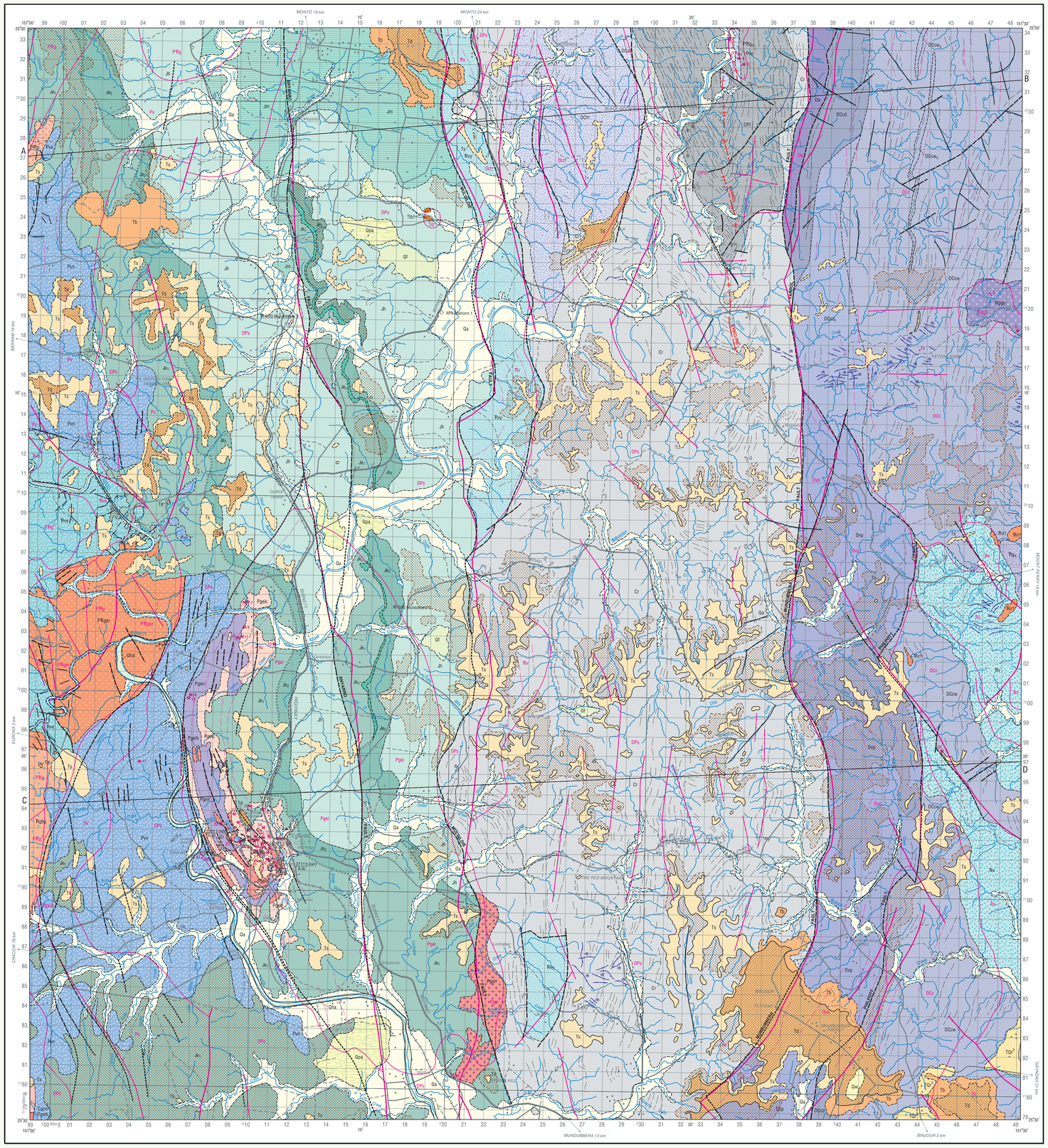
EIDSVOLD

QUEENSLAND

AUSTRALIA 1:100 000 GEOLOGICAL SERIES

SHEET 9147



QUATERNARY

- Qha — *Sand, gravel, silt and clay; active stream channels and low terraces*
- Qa — *Clay, silt, sand, gravel; flood-plain alluvium*
- Qw — *Clay, silt; swamp deposits*
- Qf — *Muddy sand, sandy and muddy gravel; alluvial fans, sheetwash and floodout sheets*
- Qpa — *Clay, silt, sand, gravel; flood-plain alluvium on high terraces*

LATE TERTIARY - QUATERNARY

- TQ^2 — *Black soil (basalt-derived)*

TERTIARY

- *Deep weathering profile: mottled, leached and kaolinised rock*
- Td — *Duricrusted palaeosols at the top of deep weathering profiles, including ferricrete and silcrete; duricrusted old land surfaces*
- Ts — *Clayey sublable to quartzose sandstone, sandy claystone, laminated siltstone, and minor conglomerate*
- Tb — *Mostly olivine basalt; moderate magnetic domain*
- Tlb — *Olivine basalt; plug; high magnetic domain*

JURASSIC

- Jm — *Carbonaceous mudstone, labile to quartzose sandstone, minor coal* — Mulgildie Coal Measures
- Jh — *Pale brown to pale grey, poorly sorted, medium-grained, feldspathic sublable sandstone (at base) and fine-grained, well-sorted quartzose sandstone (at top); minor dark grey carbonaceous siltstone, mudstone and rare pebble conglomerate* — Hutton Sandstone
- Jh$_2$ — *Mudstone, siltstone and fine-grained sublable sandstone; oolitic chamositic ironstone at the base* — Evergreen Formation
- Jh — *Fine lithic sandstone, siltstone, mudstone, yellowish brown to brown, oolitic or pelletal ironstone*
- Jh$_1$ — *Pale grey to greenish grey, flaggy, fine to medium-grained, micaceous, labile to sublable sandstone; pale green or khaki mudstone, carbonaceous mudstone; minor white siltstone and coal*
- Jp — *White to brown, poorly sorted, thick-bedded, cross-bedded, fine to very coarse-grained, pebbly quartzose sandstone; minor white to yellowish brown, laminated siltstone (in upper part) carbonaceous shale, lithic sublable sandstone, granule conglomerate (Section only)* — Precipice Sandstone

TRIASSIC

- RTd — *Diorite*
- Rlr — *Felsic intrusive*
- Rgbg — *Pale brown, coarse-grained to aplitic, equigranular, arfvedsonite-bearing leucocratic granophyre* — Boolgal Granophyre
- Rggb — *Biotite-hornblende quartz diorite, biotite pyroxene quartz diorite; high to very high magnetic domain* — Greenbank Quartz Diorite
- Rv — *Polymictic, volcaniclastic, pebble to cobble conglomerate, volcaniclastic sandstone; trachytic to andesitic, lithic and crystal tuff; quartz-lithic sandstone and siltstone; rare carbonaceous siltstone; low to moderate magnetic domain*
- Rvy — *Boulder conglomerate, lithic sandstone, rhyolitic and andesitic volcanics, siltstone, shale* — Cynthia beds
- Rve — *Pink to orange, crystal-rich, moderately lithic-rich rhyolitic tuff, crystal-rich, flamme-rich, mostly rhyolitic ignimbrite, flow-banded porphyritic rhyolite and breccia; low magnetic domain* — Mount Eagle Volcanics

LATE PERMIAN - EARLY TRIASSIC

- PRgd — *Hornblende diorite, biotite-hornblende quartz diorite, monzodiorite and monzonite; high to very high magnetic domain*
- PRg — *Granite, granodiorite, diorite; moderate to high magnetic domain*
- PRg^1 — *Granite, granodiorite; low magnetic domain*
- PRgei — *Fine to medium-grained, equigranular to locally porphyritic hornblende-biotite granite; moderate to high magnetic domain* — Euroka Granite

LATE PERMIAN — Eidsvold Complex

- Pgclc — *Leucocratic biotite granite, hornblende-biotite granodiorite, hornblende quartz gabbro; high to very high magnetic domain* — Ceratodus Granite
- Pgelc — *Fine to medium-grained equigranular leucocratic biotite granite* — Harkness Granodiorite
- Pgeih — *Coarse-grained hornblende granodiorite, locally intermingled with diorite (zones of magma mixing)* — Mount Rose Gabbro
- Pgeir — *Medium to dark grey, fine-grained diorite and coarse gabbro; coarse-grained hornblende granodiorite, locally intermingled with the diorite (zones of magma mixing)*

EARLY PERMIAN

- Pgwb — *Grey, equigranular, fine to medium-grained, saccharoidal biotite granite to granodiorite with common microdiorite xenoliths and hornblende aggregates; moderate magnetic domain* — Widbury Granite
- Pv — *Undivided volcanic rocks; moderate magnetic domain*
- Pvd — *Basaltic to andesitic volcanic sandstone and oligomictic conglomerate or breccia, andesite lava and subordinate flow-banded rhyolite and dacitic to rhyolitic ignimbrite; locally cleaved siltstone, carbonaceous mudstone and minor sandstone* — Nogo beds
- Pvo — *Andesitic lava, lithic sandstone, siltstone* — Owl Gully Volcanics

DEVONIAN - EARLY PERMIAN

- DPs — *Undivided sedimentary rocks; low magnetic domain*

LATE CARBONIFEROUS - EARLY PERMIAN

- CPl — *Bryozoan-rich mudstone, fossiliferous siltstone, sandstone, granite-rich, quartz-bearing, polymictic conglomerate, and subordinate crinoid-rich limestone* — Lorray Formation
- Cgon — *Equigranular, fine-grained biotite granodiorite or granite, irregularly foliated fine to medium-grained biotite gneiss and grey hornblende-biotite granodiorite; common pegmatite and aplite dykes* — Coonambula Granodiorite

EARLY CARBONIFEROUS

- Cr — *Dark grey mudstone, siltstone, felsic volcaniclastic sandstone, polymictic conglomerate, coal-bearing sandstone and conglomerate with mudstone rip-up clasts; oolitic and pisolitic limestone and minor skeletal limestone; rare rhyolitic ignimbrite; low magnetic domain* — Rockhampton Group

LATE DEVONIAN - CARBONIFEROUS

- DCc — *Undivided sedimentary rocks; low magnetic domain* — Curtis Island Group
- DCcw — *Mudstone, lithic sandstone (locally containing silicified oolites), siltstone, jasper, chert, slate; local schist* — Wandilla Formation
- DCcw$_1$ — *Chert or quartzite; resistant, ridge-forming units*
- DCcd — *Chert, jasper, mudstone, siltstone, lithic sandstone, limestone and altered basalt* — Doonside Formation
- DCcd$_1$ — *Mudstone, siltstone, lithic sandstone, limestone and altered basalt*
- DCt — *Green-grey to purple, granule to cobble, andesitic to basaltic polymictic conglomerate, lithofeldspathic to feldspatholithic sandstone, siltstone, mudstone, andesite, minor felsic tuff, fossiliferous limestone; rare basaltic pillow lava and hyaloclastite; low to moderate magnetic domain* — Three Moon Conglomerate
- DCa — *Thinly interbedded fine-grained sandstone and siltstone and thick beds of conglomerate with andesitic to dacitic clasts and siltstone rip-up clasts* — Mount Alma Formation

LATE DEVONIAN

- Da — *Lithic sandstone, siltstone, conglomerate; high magnetic domain* — Channer Creek Beds

EARLY DEVONIAN - MIDDLE DEVONIAN

- Dvp — *Andesitic and basaltic volcaniclastic rocks and possibly lava, lithic arenite, mudstone and limestone; undivided rocks of the Philpott Subprovince; high magnetic domain*

GEOLOGICAL SYMBOLS

- Geological boundary
- Weathering boundary
- Fault
- Dyke or vein; rh - rhyolite
- Syncline

Where location of boundaries, faults and folds is approximate, line is broken; where inferred, queried; where concealed, boundaries and folds are dotted, faults are shown by short dashes.

- Strike and dip of strata
- Strike and dip of overturned strata
- Strike and dip of strata facing unknown
- Strike and dip of foliation
- Strike and dip of foliation first deformation episode
- Strike and dip of cleavage
- Strike and dip of platy alignment
- Trend line / Lineament — Airphoto interpretation
- Macrofossil locality
- Plant fossil locality
- GSQ Mundubbera 3 — Drill hole with reference number
- Petroleum exploration well, dry, abandoned
- 2691±5 (ser) K-Ar — Isotopic age in million of years; k-Ar - potassium-argon method; bi - biotite ho - hornblende ser - sericite
- Oolitic ironstone marker bed

There are some structural symbols shown in unconsolidated to partly consolidated Cainozoic sediments on the face of the map. These symbols refer to the underlying bedrock which forms scattered outcrops too small to be shown.

MAGNETIC INTERPRETATION

Magnetic interpretation is shown in magenta using standard geological linestyles. Areas labelled in magenta indicate the extent of mapped units, or anomalies associated with concealed magnetic units, interpreted from airborne magnetic data.

TOPOGRAPHICAL AND CULTURAL FEATURES

- Highway
- Secondary road
- Minor road
- Vehicle track
- Railway, station
- Fence
- Cromulla — Homestead
- Building, small settlement

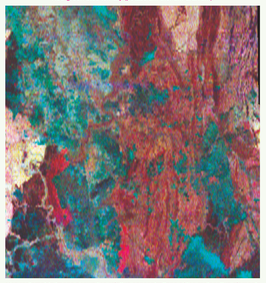
MINING SYMBOLS

- Mine
- Mine, abandoned
- Alluvial workings, abandoned
- Prospect
- • Au — Mineral occurrence

Au - gold, Bx - bauxite, Cu - copper, Ck - kaolin, Sb - antimony, Ss - sandstone

RADIOMETRIC IMAGE

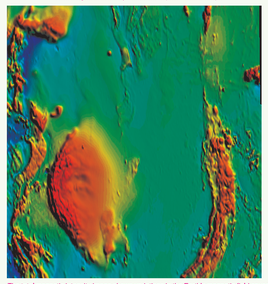
Red-green-blue ternary (potassium-thorium-uranium)



The radiometric image shows the relative concentrations of the radioactive elements potassium, thorium and uranium in the topmost 20-30 cm of the Earth's surface, as measured by an airborne detector that records gamma radiation. The data are displayed as a composite coloured image, with potassium in red, thorium in green and uranium in blue. Rock units with different contents of these elements are clearly outlined by their different colours. Those with relatively high contents of all three elements appear whitish on the image; those with low contents are dark, for example the Nogo beds.

MAGNETIC IMAGE

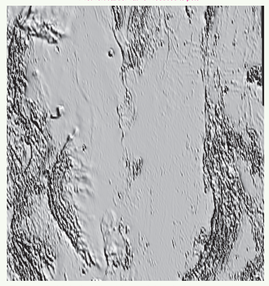
Total magnetic intensity - reduced to pole - colour drape



The total magnetic intensity image shows variations in the Earth's magnetic field caused by differences in the magnetic properties of rock units in the upper crust. The magnetic response of rocks is directly related to the content of magnetic minerals, and is depicted by means of a rainbow colour scale from red (strongly magnetic), through yellow (moderately magnetic), to blue (weakly to non-magnetic). The structure has been enhanced by draping the coloured image over a grey-scale version of the same data to which a NE sun-angle has been applied.

MAGNETIC IMAGE

First vertical derivative - reduced to pole



The first vertical derivative of the total magnetic intensity data enhances short-wavelength magnetic features relative to those with long wavelengths. This image emphasises the high gradients around the edges of magnetic bodies, and in particular highlights narrow linear magnetic features such as dykes.

Images generated from airborne geophysical data available from the Department of Mines and Energy, Brisbane.

Published by the Geological Survey of Queensland (GSQ), Department of Mines and Energy, Queensland.

INDEX TO 1:100 000 MAPS

1:250 000 maps shown in blue

BANANA 8949	BILOELA 9049	CALLIOPE 9149	MIRANI VALE 9249	MITCHELL CREEK 9349
	MONTO			MUNDUBERA
THEODORE 8948	SCOPAS 9048	MONTO 9148	ROSEDALE 9248	MONTEVIDEO 9348
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	MUNDUBBERA			MARYBOROUGH
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SG 56-05 SG 56-06 SG 56-09

Queensland Government
Department of Mines and Energy

SCALE 1:100 000

1 0 1 2 3 4 5 6 7 8 9 10

KILOMETRES

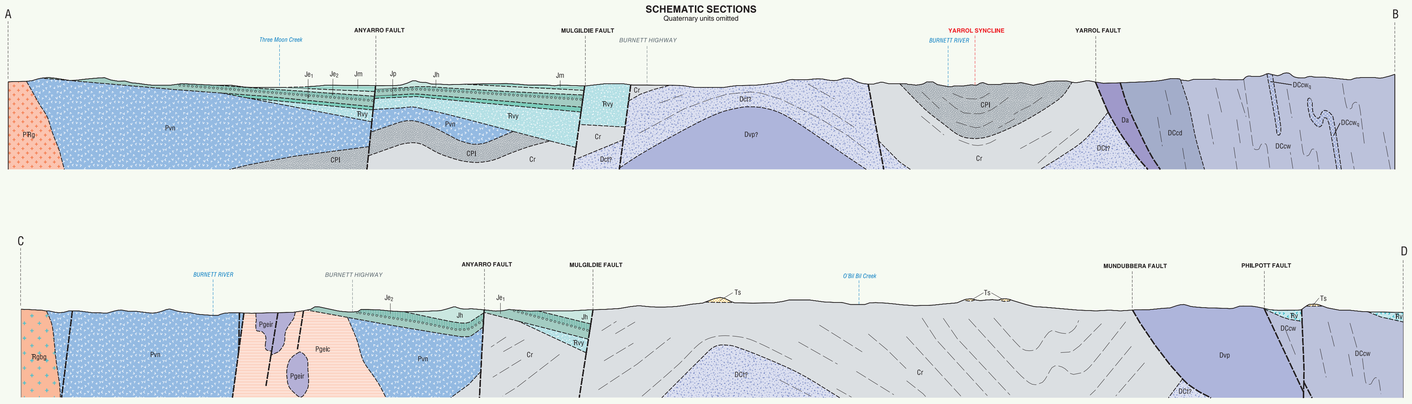
GREY NUMBERED LINES ARE 1 000 METRE INTERVALS OF THE MAP GRID OF AUSTRALIA 1994, ZONE 56
UNIVERSAL TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994 (GDA94)

GDA

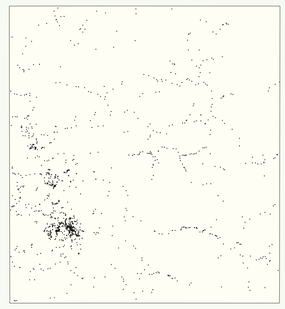
Geology: 1970–71 by W.G.Whitaker, P.R.Murphy, R.G.Rollason and A.G.Kirkegaard (GSQ)
: 1997, 1999 by F.E.Von Gnielinski (GSQ)
: 2005 by I.W.Withnall (GSQ) (airphoto and geophysical interpretation)
Mineral occurrence mapping: 1997 by J.S.Lam (GSQ)
Compiled by I.W.Withnall and C.L.Hebbard
Cartography by C.L.Hebbard, Graphic Services, GSQ, Department of Mines and Energy

SCHEMATIC SECTIONS

Quaternary units omitted



FIELD OBSERVATION POINTS



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	87	Swindle Hill North	Au 075917
	88	Swindle Hill South	Au 075915
	89	Craventown Workings	Au 088898

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